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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,063	07/22/2003	Venkateshwar Rao Pullala	79771	8263

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THE LAW OFFICE OF KIRK D. WILLIAMS
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EXAMINER

DOAN, DUC T

ART UNIT PAPER NUMBER

2188

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,063

Applicant(s)

PULLELA ET AL.

Examiner

Duc T. Doan

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Status of Claims

Claims 1-25 are in the application.

Claims 1-25 are rejected.

Claim Objections

It is noted that the claims are not numbering consecutively. Claim 18 is missing from the original list of claims.

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 19-25 been renumbered 18-24.

Claim Rejection 35 USC 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 11-17 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 11 is not limited to tangible embodiments. In view of applicants' disclosure, specification page 7, lines 12-18, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., storage device, page 7, line 14) and intangible embodiments (e.g., signal mechanism, page 7, line 15; signal received and transmitted, page 7, line 17). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

All dependent claims are rejected as having the same deficiencies as the claims they depend from.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2,4-9,19-20,22-25 rejected under 35 U.S.C. 102 (e) as being anticipated by Ikeda et al (US 6788683).

As for claim 1, Ikeda describes a method for processing packets, the method comprising: identifying a first packet (Ikeda's Fig 1: #1), identifying a flow identification value based on the

packet (Ikeda's Fig 1: #21 received VPI/VCI); performing a lookup based on the flow identification value to identify a flow identification value mask (Ikeda's Fig 1: #3 lookup retrieval table to identify retrieval flag; column 3 lines 20-30).

As for claim 2, Ikeda describes masking the flow identification value with the flow identification value mask to generate a masked flow identification value (Ikeda's Fig 1: #26 retrieval key; column 3 lines 20-30).

As for claim 4, Ikeda describes wherein the flow identification value includes at least two items of the list consisting of source address, destination address, source port, destination port, and protocol type (Ikeda's Fig 2 shows the retrieve flag to mask corresponding fields in the packet header such as source address, destination address).

As for claim 5, Ikeda describes wherein the flow identification value includes a transport layer, session layer, presentation layer or application layer value (Ikeda's column 1, lines 47-55).

As for claim 6, the claim recites wherein said performing a lookup based on the flow identification value includes performing a lookup operation in an access control list. Ikeda describes a lookup of the retrieval flag table (Fig 1: #3), which is based on the information from a received IP packet. The lookup information in the retrieval flag table is used to further filter packets in a router (Fig 2: #5,7). Thus the retrieval flag table functions as the claim's access control list.

As for claim 7, the claim recites wherein said performing the lookup operation based on the flow identification value includes: performing a first lookup operation on a first set of associative memory entries based on the flow identification value to generate an associative memory result; and performing a second lookup operation in an adjunct memory based on the

associative memory result to identify the flow identification value mask. Examiner notes that the claim describing a standard lookup function of a content addressable memory and retrieving data from its associating ram portion. Ikeda describes the retrieval flag table (Fig 1: #3), which is looked up using the header information from received packet. The retrieval flag table is used to retrieve retrieval flag which corresponding to the claim's identification value mask. Since the lookup of the retrieve flag table based on the matching of fields in a received IP packet. It's inherently the retrieve flag table to be implemented using an associative memory device such as content addressable memory and it's associating ram portion.

Claim 8 rejected based on the same rationale as in the rejection of claim 6.

Claims 9,19 rejected based on the same rationale as in the rejection of claim 1.

Claims 20 rejected based on the same rationale as in the rejection of claim 2.

Claim 22 rejected based on the same rationale as in the rejection of claim 4.

Claim 23 rejected based on the same rationale as in the rejection of claim 5.

Claim 24 rejected based on the same rationale as in the rejection of claim 6.

Claim 25 rejected based on the same rationale as in the rejection of claim 7.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3,10,21 rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al (US 6788683) as applied to claims 1,9,19 respectively and further in view of Yasue (US Pub 2004/0028041).

As for claim 3, the claim recites updating a data structure based on the masked flow identification value. Ikeda does not describe the claim's detail of updating a data structure. However, Yasue describes a memory (Yasue's Fig 9: #71), which uses the flow information (Fig 9: flow no 90f) to keep track and updating a statistic value such as received byte number of packets (Fig 9: #s11). It would have been obvious to one of ordinary skill in the art at the time of invention to include statistic value as suggested by Yasue in Ikeda's system to keep track of bytes being received and thereby determining a violation of band policy (Yasue's page 6, paragraphs 128, 133).

Claim 10 rejected based on the same rationale as in the rejection of claims 2-3.

Claim 21 rejected based on the same rationale as in the rejection of claim 3.

Conclusion

When responding to the office action, Applicant is advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Doan whose telephone number is 571-272-4171. The examiner can normally be reached on M-F 8:00 AM 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin L. Ellis
Primary Examiner

Kevin L. Ellis